Preliminary Engineering is the process by which the scope of the proposed project is finalized, estimates of project costs, benefits and impacts are refined, NEPA requirements are completed, project management plans and fleet management plans are further developed, and local funding commitments are put in place.

Secretary means the Secretary of Transportation.

TEA-21 means the Transportation Equity Act for the 21st Century.

§ 611.7 Relation to planning and project development processes.

All new start projects proposed for funding assistance under 49 USC 5309 must emerge from the metropolitan and Statewide planning process, consistent with 23 CFR part 450. To be eligible for FTA capital investment funding, a proposed project must be based on the results of alternatives analysis and preliminary engineering.

- (a) Alternatives Analysis. (1) To be eligible for FTA capital investment funding for a major fixed guideway transit project, local project sponsors must perform an alternatives analysis.
- (2) The alternatives analysis develops information on the benefits, costs, and impacts of alternative strategies to address a transportation problem in a given corridor, leading to the adoption of a locally preferred alternative.
- (3) The alternative strategies evaluated in an alternatives analysis must include a no-build alternative, a baseline alternative, and an appropriate number of build alternatives. Where project sponsors believe the no-build alternative fulfills the requirements for a baseline alternative, FTA will determine whether to require a separate baseline alternative on a case-by-case basis
- (4) The locally preferred alternative must be selected from among the evaluated alternative strategies and formally adopted and included in the metropolitan planning organization's financially-constrained long-range regional transportation plan.
- (b) Preliminary Engineering. Consistent with 49 USC 5309(e)(6) and 5328(a)(2), FTA will approve/disapprove entry of a proposed project into preliminary engineering within 30 days of

receipt of a formal request from the project sponsor(s).

- (1) A proposed project can be considered for advancement into preliminary engineering only if:
- (i) Alternatives analysis has been completed
- (ii) The proposed project is adopted as the locally preferred alternative by the Metropolitan Planning Organization into its financially constrained metropolitan transportation plan;
- (iii) Project sponsors have demonstrated adequate technical capability to carry out preliminary engineering for the proposed project; and
- (iv) All other applicable Federal and FTA program requirements have been met.
- (2) FTA's approval will be based on the results of its evaluation as described in §§ 611.9–611.13.
- (3) At a minimum, a proposed project must receive an overall rating of "recommended" to be approved for entry into preliminary engineering.
- (4) This part does not in any way revoke prior FTA approvals to enter preliminary engineering made prior to February 5, 2001.
- (5) Projects approved to advance into preliminary engineering receive blanket pre-award authority to incur project costs for preliminary engineering activities prior to grant approval.
- (i) This pre-award authority does not constitute a commitment by FTA that future Federal funds will be approved for this project.
- (ii) All Federal requirements must be met prior to incurring costs in order to retain eligibility of the costs for future FTA grant assistance.
- (c) Final Design. Consistent with 49 USC 5309(e)(6) and 5328(a)(3), FTA will approve/disapprove entry of a proposed project into final design within 120 days of receipt of a formal request from the project sponsor(s).
- (1) A proposed project can be considered for advancement into final design only if:
- (i) The NEPA process has been completed;
- (ii) Project sponsors have demonstrated adequate technical capability to carry out final design for the proposed project; and

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- (iii) All other applicable Federal and FTA program requirements have been met.
- (2) FTA's approval will be based on the results of its evaluation as described in Parts §§611.9-611.13 of this Rule.
- (3) At a minimum, a proposed project must receive an overall rating of "recommended" to be approved for entry into final design.
- (4) Consistent with the Government Performance and Results Act of 1993, project sponsors seeking FFGAs shall submit a complete plan for collection and analysis of information to identify the impacts of the new start project and the accuracy of the forecasts prepared during development of the project.
- (i) The plan shall provide for: Collection of "before" data on the current transit system; documentation of the "predicted" scope, service levels, capital costs, operating costs, and ridership of the project; collection of "after" data on the transit system two years after opening of the new start project; and analysis of the consistency of "predicted" project characteristics with the "after" data.
- (ii) The "before" data collection shall obtain information on transit service levels and ridership patterns, including origins and destinations, access modes, trip purposes, and rider characteristics. The "after" data collection shall obtain analogous information on transit service levels and ridership patterns, plus information on the as-built scope and capital costs of the new start project.
- (iii) The analysis of this information shall describe the impacts of the new start project on transit services and transit ridership, evaluate the consistency of "predicted" and actual project characteristics and performance, and identify sources of differences between "predicted" and actual outcomes.
- (iv) For funding purposes, preparation of the plan for collection and analysis of data is an eligible part of the proposed project.
- (5) Project sponsors shall collect data on the current system, according to the plan required under §611.7(c)(4) as approved by FTA, prior to the beginning of construction of the proposed

- new start. Collection of this data is an eligible part of the proposed project for funding purposes.
- (6) This part does not in any way revoke prior FTA approvals to enter final design that were made prior to February 5, 2001.
- (7) Projects approved to advance into final design receive blanket pre-award authority to incur project costs for final design activities prior to grant approval.
- (i) This pre-award authority does not extend to right of way acquisition or construction, nor does it constitute a commitment by FTA that future Federal funds will be approved for this project.
- (ii) All Federal requirements must be met prior to incurring costs in order to retain eligibility of the costs for future FTA grant assistance.
- (d) Full funding grant agreements. (1) FTA will determine whether to execute an FFGA based on:
- (i) The evaluations and ratings established by this rule;
- (ii) The technical capability of project sponsors to complete the proposed new starts project; and
- (iii) A determination by FTA that no outstanding issues exist that could interfere with successful implementation of the proposed new starts project.
- (2) An FFGA shall not be executed for a project that is not authorized for final design and construction by Federal law.
- (3) FFGAs will be executed only for those projects which:
- (i) Are rated as "recommended" or "highly recommended;"
- (ii) Have completed the appropriate steps in the project development process:
- (iii) Meet all applicable Federal and FTA program requirements; and
- (iv) Are ready to utilize Federal new starts funds, consistent with available program authorization.
- (4) In any instance in which FTA decides to provide financial assistance under section 5309 for construction of a new start project, FTA will negotiate an FFGA with the grantee during final design of that project. Pursuant to the terms and conditions of the FFGA:

- (i) A maximum level of Federal financial contribution under the section 5309 new starts program will be fixed;
- (ii) The grantee will be required to complete construction of the project, as defined, to the point of initiation of revenue operations, and to absorb any additional costs incurred or necessitated;
- (iii) FTA and the grantee will establish a schedule for anticipating Federal contributions during the final design and construction period; and
- (iv) Specific annual contributions under the FFGA will be subject to the availability of budget authority and the ability of the grantee to use the funds effectively.
- (5) The total amount of Federal obligations under Full Funding Grant Agreements and potential obligations under Letters of Intent will not exceed the amount authorized for new starts under 49 U.S.C. §5309.
- (6) FTA may also make a "contingent commitment," which is subject to future congressional authorizations and appropriations, pursuant to 49 U.S.C. 5309(g), 5338(b), and 5338(h).
- (7) Consistent with the Government Performance and Results Act of 1993 (GPRA), the FFGA will require implementation of the data collection plan prepared in accordance with §611.7(c)(4):
- (i) Prior to the beginning of construction activities the grantee shall collect the "before" data on the existing system, if such data has not already been collected as part of final design, and document the predicted characteristics and performance of the project.
- (ii) Two years after the project opens for revenue service, the grantee shall collect the "after" data on the transit system and the new start project, determine the impacts of the project, analyze the consistency of the "predicted" performance of the project with the "after" data, and report the findings and supporting data to FTA.
- (iii) For funding purposes, collection of the "before" data, collection of the "after" data, and the development and reporting of findings are eligible parts of the proposed project.
- (8) This part does not in any way alter, revoke, or require re-evaluation

of existing FFGAs that were issued prior to February 5, 2001.

§611.9 Project justification criteria for grants and loans for fixed guideway systems.

In order to approve a grant or loan for a proposed new starts project under 49 U.S.C. 5309, and to approve entry into preliminary engineering and final design as required by section 5309(e)(6), FTA must find that the proposed project is justified as described in section 5309(e)(1)(B).

- (a) To make the statutory evaluations and assign ratings for project justification, FTA will evaluate information developed locally through alternatives analyses and refined through preliminary engineering and final design.
- (1) The method used to make this determination will be a multiple measure approach in which the merits of candidate projects will be evaluated in terms of each of the criteria specified by this section.
- (2) The measures for these criteria are specified in Appendix A to this rule.
- (3) The measures will be applied to the project as it has been proposed to FTA for new starts funding under 49 U.S.C. 5309.
- (4) The ratings for each of the criteria will be expressed in terms of descriptive indicators, as follows: "high," "medium-high," "medium," "low-medium," or "low."
 - (b) The criteria are as follows:
 - (1) Mobility Improvements.
 - (2) Environmental Benefits.
 - (3) Operating Efficiencies.
- (4) Transportation System User Benefits (Cost-Effectiveness).
- (5) Existing land use, transit supportive land use policies, and future patterns.
- (6) Other factors. Additional factors, including but not limited to:
- (i) The degree to which the programs and policies (e.g., parking policies, etc.) are in place as assumed in the forecasts.
- (ii) Project management capability, including the technical capability of the grant recipient to construct the project, and